

7075-T6 6.000 X 6.000"

Work Order ID 93706

93706

Page 1

December 5, 2012 1:47:38 PM

Item ID: 647.9611

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: LH Aft Wiper Deflector

Start Date: 11/26/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/14/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan: CLDate: 12/12/05 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

| Sequence ID | Operation | Set Up/ | Tool ID | Tool Code | Accept | Reject | Reject | sp. |
|----------------|-------------|-----------|---------|-----------|--------|--------|--------|-------|
| Work Center ID | Description | Run Hours | | Code | Qty | Qty | Number | Stamp |

Draw Nbr

Revision Nbr

647.9600

100

0.00

100

Bandsaw

Memo

0.00

Jeaspa Bandsaw

CUT AT 7.25" LONG

on 13/02/27 10

110

0.00

110

Outsource5

Memo

0.00

Outsource process - Machining

ISSUE P/O: 18599
POSSIBLE SUPPLIER: ARCHER PRECISION

Certificate of conformaty required

pl 12-6-12

115

Receive & Inspect for Damage & Mat'l Certs

0.00

115

Packaging

Memo

0.00

Packaging

13/10/12 (10)

PTO

NCR: ☒ Yes / No

Pink NCR #14-3518

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: DAF Date: 14/02/11QA Closed: DAF Date: 14-2-10

| | | | | | |
|--------------------------|--|------------------------------------|--|--|--------------------------------------|
| Work Order: <u>93706</u> | DISPOSITION Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS | | | |
| Part No. <u>643-9611</u> | | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> |
| NCR No. <u>14-3507</u> | | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> |
| | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | |
| | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input checked="" type="checkbox"/> | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|----------|------|-----|--|--------------------------------|----------------------|-------------|--------------|--------------------------------|
| Doc/Data <input type="checkbox"/> | 13-10-11 | 115 | 5 | ← part not machined on black tip 1 - machining process step mid part 1 - bottom contours misaligned operator loaded wrong program QTY ① | DAS 16 9-89 Q57042 14/01/31 | Destroyed no replace | DAS 27 9-89 | 13 11 13 | DAS 16 9-89 Q57042 14/01/31 |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | |
| Setup <input checked="" type="checkbox"/> | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | Grain | Other |
|---|---|--|---|
| <input type="checkbox"/> Bending | <input type="checkbox"/> Bend | <input type="checkbox"/> Grain | <input type="checkbox"/> Ovalized |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Hardware | <input type="checkbox"/> Over/Under tolerance |
| <input type="checkbox"/> Cracks | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete | <input type="checkbox"/> Part Incorrect |
| <input type="checkbox"/> Crushed/Crimped | <input type="checkbox"/> Burrs | <input type="checkbox"/> Instructions Incomplete/Unclear | <input type="checkbox"/> Part Lost/Missing |
| <input type="checkbox"/> Cuffs | <input type="checkbox"/> Contamination | <input type="checkbox"/> Maintenance | <input type="checkbox"/> Part Moved |
| <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Countersink | <input type="checkbox"/> Mislabelled | <input type="checkbox"/> Positioned Wrong |
| <input type="checkbox"/> Inspection Strip in Tube | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Misread | <input type="checkbox"/> Power Loss/Surge |
| <input type="checkbox"/> Ripples in Bend | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Offset | <input type="checkbox"/> Pressure/Forced |
| <input type="checkbox"/> Torque Waves in Extrusion | <input type="checkbox"/> Drawing | <input type="checkbox"/> Out of Calibration | <input type="checkbox"/> Temperature/Cure |
| <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Finish | <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Weld |
| <input type="checkbox"/> Wave/Twist in Tube | <input type="checkbox"/> Folio | <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Wrong Stock Pulled |
| | | | <input type="checkbox"/> Other |

Work Order ID 93706***93706***

Page 2

December 5, 2012 1:47:38 PM

Item ID: 647.9611

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: LH Aft Wiper Deflector

Start Date: 11/26/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/14/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

| Work Center ID | Operation Description | Set Up/Run Hours | Tool ID | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|-----------------------------|---|------------------|-------------|-----------|------------|------------|---------------|-------------|
| 117 | QC6- Inspect dimensions to drawing | 0.00 | | | | | | |
| *117* | | | | | | | | |
| QC | Memo | 0.00 | | | | | | |
| Quality Control | | | | | | | | |
| | | | DAS 27 3:39 | | | | | |
| | | | B 10 10 | | | | | |
| 118 | | 0.00 | | | | | | |
| *118* | | | | | | | | |
| HandFinish | Memo | 0.00 | | | | | | |
| Hand Finishing | REMOVE ALL PART MARKINGS | | N/A | | | | | |
| | | | | | | | | |
| 120 | | 0.00 | | | | | | |
| *120* | | | | | | | | |
| Outsource4 | Memo | 0.00 | | | | | | |
| Outsource process - Anodize | HARD ANODIZE 1AW MIL-A-8625 TYPE 3 COLOUR BLACK | | | | | | | |

3

CL 13/10/18

CL 13/10/18 (3)

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|--|------|------|-----|---|----------------------|---|----------------|--------------|--------------|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | |
| Operator | | | | | | | | | | | |
| Material | | | | | | | | | | | |
| Setup | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| Process | | | | | | | | | | | |
| Supplier | | | | | | | | | | | |
| Training | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | |

| FAULT CATEGORY | | | | | | | | | | | |
|---|--|--|---|--|--|---|--|--|--|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Work Order ID 93706

93706

Page 3

December 5, 2012 1:47:38 PM

Item ID: 647.9611

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: LH Aft Wiper Deflector

Start Date: 11/26/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/14/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Up
Run Hours

Tool # Plan
Code Accept Reject Reject Insp.
Qty Qty Number Stamp

130

Receive & Inspect for Damage & Mat'l Certs

0.00

130

Packaging

Memo

0.00

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

12/3/13 (3)

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.00

Quality Control

N/A DAS
27
9-89

150

Spray Painting per QS1005 4.2

0.00

150

SprayPaint

Memo

0.00

Spray Painting

PRIME AS PER DWG NOTE #2

CZ 13/10/13

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|--|------|------|-----|---|----------------------|---|----------------|--------------|--------------|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |

| FAULT CATEGORY | | | | | | | | | | | |
|---|--|--|---|--|--|---|--|--|--|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Work Order ID 93706

93706

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Item ID: 647.9611

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: LH Aft Wiper Deflector

Start Date: 11/26/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/14/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC14- Inspect Spray Paint

0.00

27

9-89

160

QC

Memo

0.00

B11B

3

Quality Control

170

Identify as per dwg & Stock Location:

0.00

170

Packaging

Memo

57417

0.00

DAS
32
9-89

14/01/31 (3)

Packaging

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.00

Quality Control

MLJ 14-02-03

(M) 14-01-31

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|---|------|------|---|---|----------------------|---|----------------|--------------|--|--|---|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Picklist Print

December 5, 2012 1:47:38 PM

Page 1

Work Order ID: 93706

Parent Item: 647.9611

Parent Item Name: LH Aft Wiper Deflector

Start Date: 11/26/12

Required Date: 12/14/12

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A NEW ISSUE 12-11-19 JLM VERIFIED BY:DD

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| 647.9611P | | Purchased | No | | | | Each | 0.0000 | | 10 | | 12/13/12 | (10) |
| LH Aft Wiper Deflector | | | | | | | | | | | | | |
| M7075T6B6.000X6.000 | | Purchased | No | | | | f | 0.0000 | | 1.2851064 | | | |
| 7075-T6 BAR 6.000' X 6.000" | | | | | | | | | | | | | |

OK

M124444 X 6.35 and 13/02/27

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

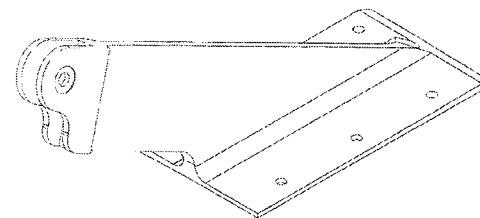
DQA: _____ Date: _____

QA Closed: _____ Date: _____

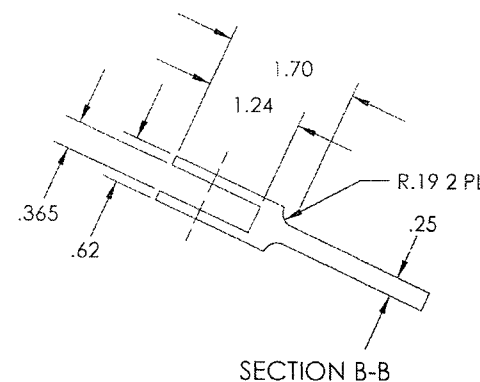
| | | | | | | | | | | | |
|---|------|------|---|---|-------------------|---|-------------|--|--------------|---|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | |

NOTES:

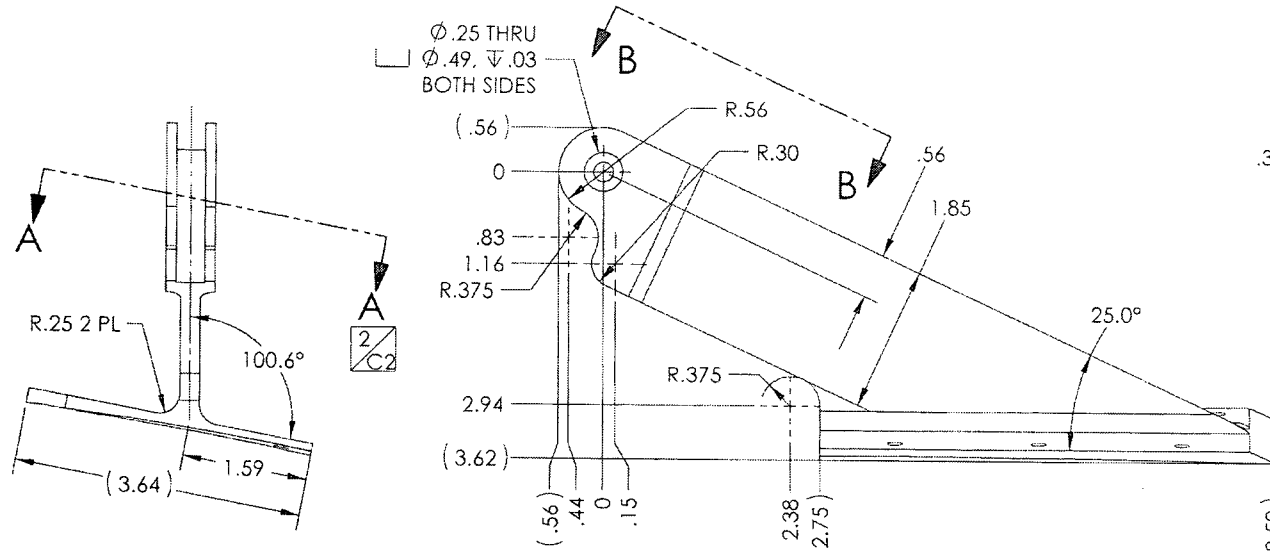
- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: ANODIZE PER MIL STD-A-8625, TYPE III, CLASS 2, COLOR BLACK;
PRETREAT PRC-DESOTO PR-148 ADHESION PROMOTER;
PRIME IAW MIL-P-23377J TYPE I CLASS N.
- 3 PART DIMENSIONS CONTROLLED BY CAD MODEL
FILE NAME: 647.9610 NC LH FWD WIPER DEFLECTOR.SLDPRT, LAST MODIFIED 06/30/10.
- 4 PART DIMENSIONS CONTROLLED BY CAD MODEL
FILE NAME: 647.9611 NC LH AFT WIPER DEFLECTOR.SLDPRT, LAST MODIFIED 06/30/10.
- 5 PART DIMENSIONS CONTROLLED BY CAD MODEL
FILE NAME: 647.9612 NC RH FWD WIPER DEFLECTOR.SLDPRT, LAST MODIFIED 06/30/10.
- 6 PART DIMENSIONS CONTROLLED BY CAD MODEL
FILE NAME: 647.9613 NC RH AFT WIPER DEFLECTOR.SLDPRT, LAST MODIFIED 06/30/10.
7. DEBURR AND BREAK ALL SHARP EDGES.
8. IDENTIFY IAW MPP-120. LASER ETCH P/N REVISION, 12 PT. CENTURY GOTHIC.



647.9610 SHOWN
647.9612 OPPOSITE



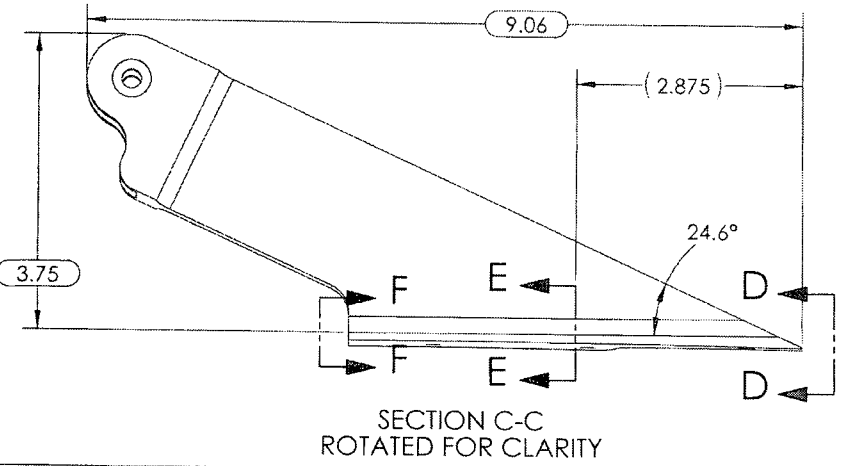
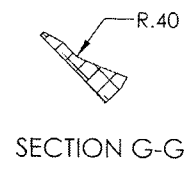
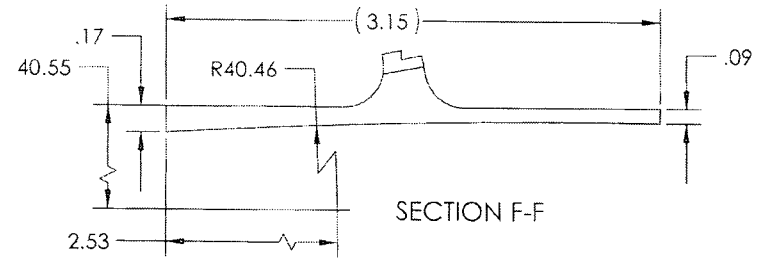
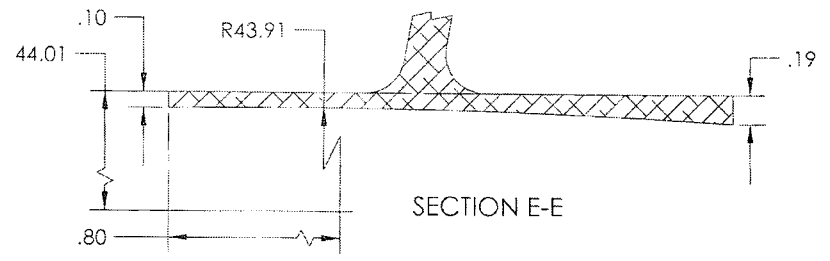
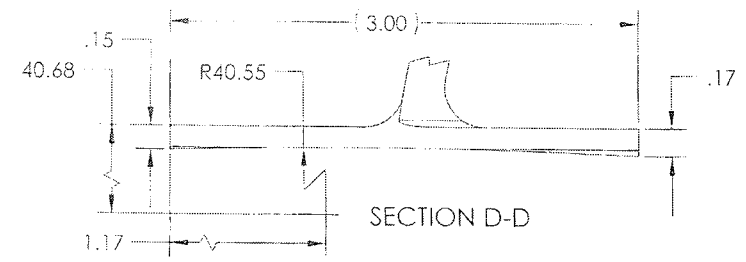
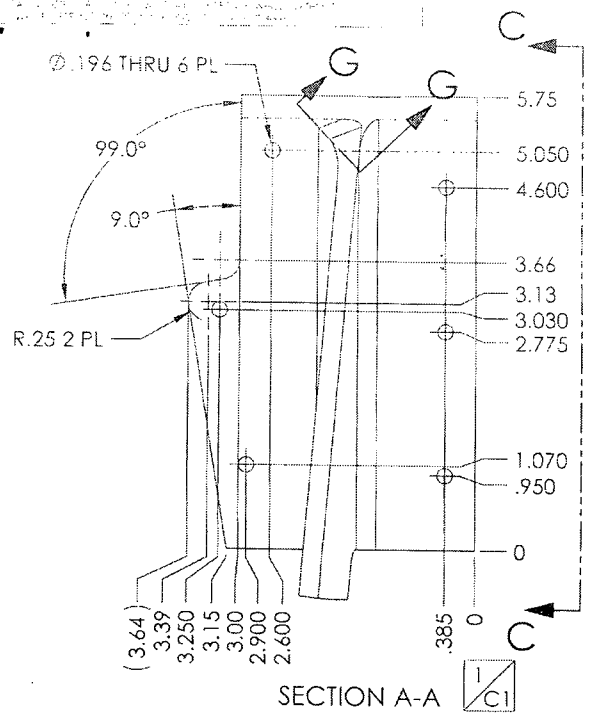
SECTION B-B



| 647.9613 | RH AFT WIPER DEFLECTOR | | | |
|---|------------------------|--------------|----------|-------|
| 647.9612 | RH FWD WIPER DEFLECTOR | | | |
| 647.9611 | LH AFT WIPER DEFLECTOR | | | |
| 647.9610 | LH FWD WIPER DEFLECTOR | | | |
| QTY | PART # | DESCRIPTION | MAT'L | SPEC. |
| PARTS LIST | | | | |
| APICAL INDUSTRIES | | | | |
| 2608 TEMPLE HEIGHTS DR. | | | | |
| OCEANSIDE, CA 92056-3512 (760) 724-5300 | | | | |
| WIPER DEFLECTOR | | | | |
| NEXT ASSY (S) | | REV | DATE | BY |
| 647.8900 | | B | 07/26/10 | MLJ |
| SCALE: NONE | | SHEET 1 OF 5 | | |

UNCOMPLETED
9370.6 MLJ
12-11-27

93706



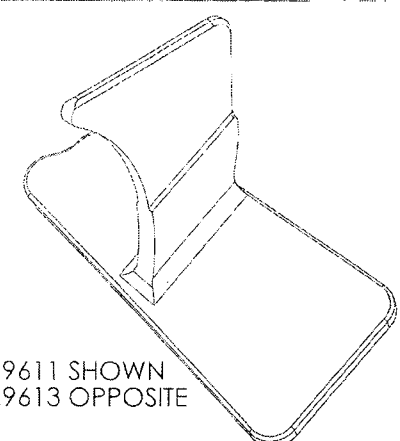
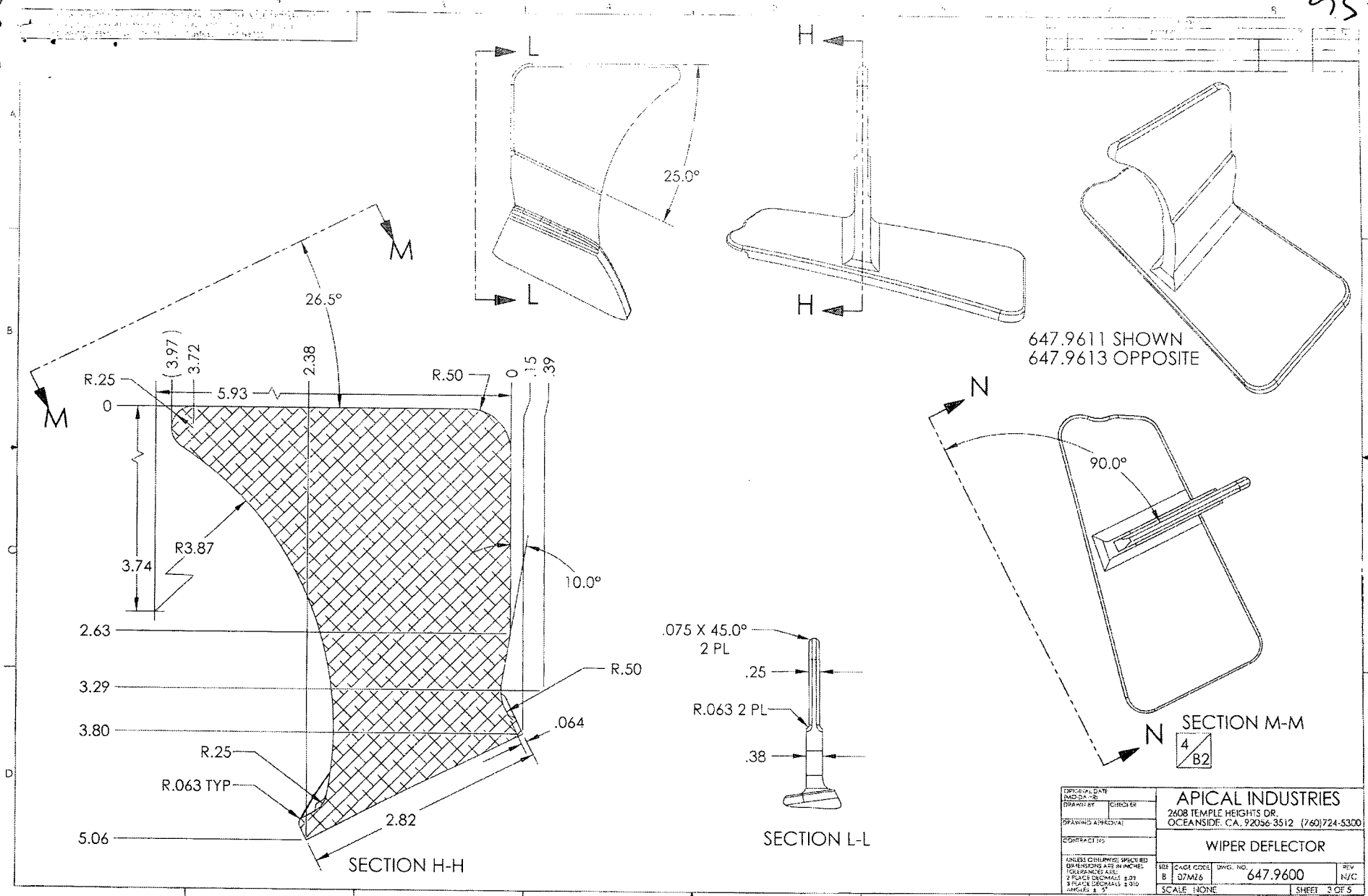
| | | | |
|-----------------------------|---------|----------|------|
| ORIGINAL DATE | 2/10/04 | BY | CHKD |
| DRAWN BY | | APPROVED | |
| CONTRACT NO. | | | |
| SHEET OTHER PRICE SPECIFIED | | | |
| TOLERANCES ARE: | | | |
| DIMENSIONS ARE: | | | |
| SPRINGS DIMENSIONS ARE: | | | |
| ANGLES ARE: | | | |
| SCALE | NONE | | |
| SHEET | 2 OF 5 | | |

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA 92056-3512 (760)724-5300

WIPER DEFLECTOR

REV. N/C

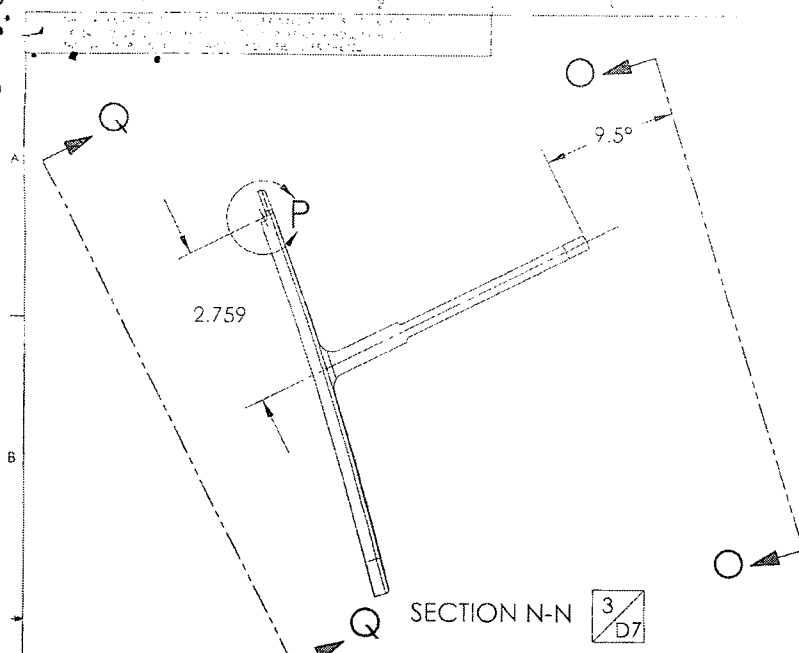
647.9600



4/B

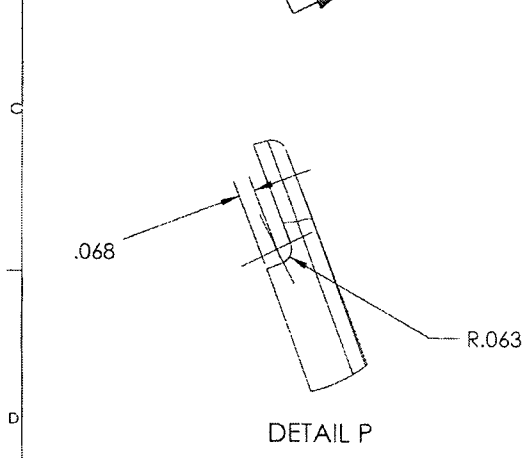
| | |
|---|--|
| ORIGINAL DATE MODA-28 DRAWN BY CHERCHER DRAWING APPROVAL CHERCHER 1/2/01 | APICAL INDUSTRIES 2408 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92036-3512 (760)724-5333 |
| CONFRONT 150 | WIPER DEFLECTOR |
| FINISHES CHAMPAGNE SPRAYED BARE-POSSIBLE SPRAYED 2 PLACES DRIVING AIL 2 PLACES DRIVING AIL 3 PLACES DRIVING AIL 100% HUNGARY 2 | SIZE 2x40 CODE DRWG. NO B 07M26 647.9600 SCALE 1:100 SHEET 3 OF 5 |

93706

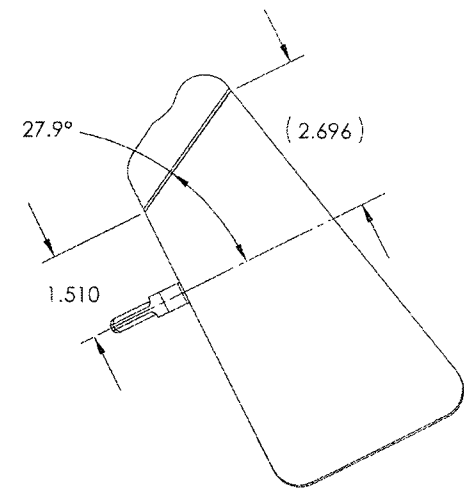


SECTION N-N

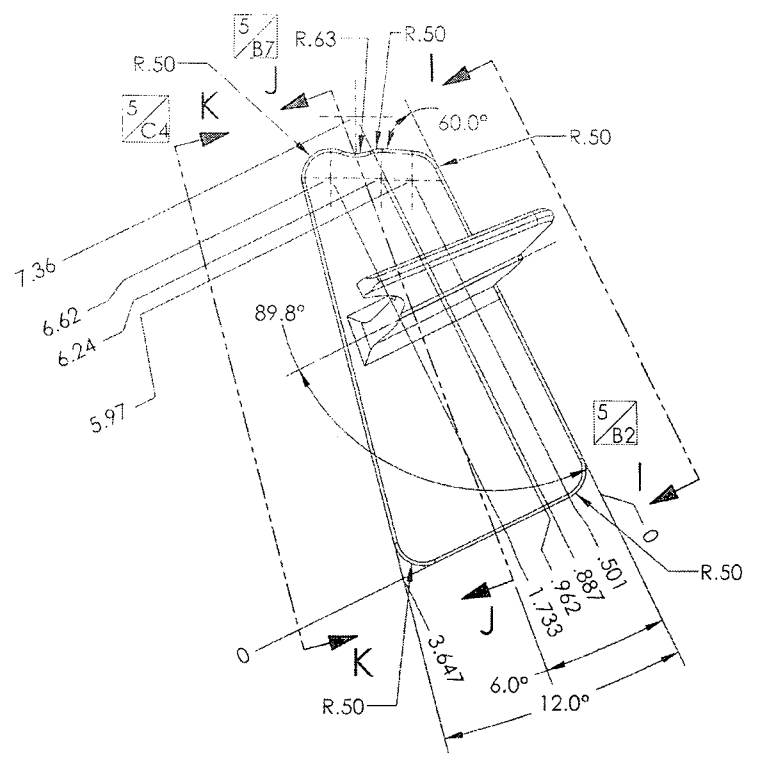
3
D7



DETAIL P



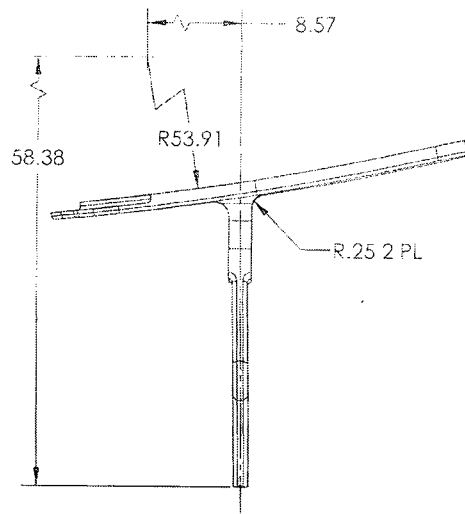
SECTION Q-Q



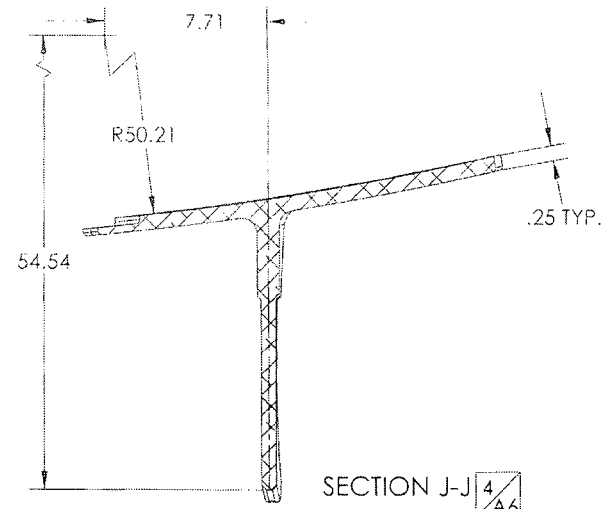
SECTION O-O

| | | | |
|--|--|---|-----------------|
| ORIGINAL DATE ENCLOSURE | | APICAL INDUSTRIES | |
| DRAWN BY: J. HOFFER | | 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300 | |
| DRAWING APPROVAL | | WIPER DEFLECTOR | |
| CONTRACT NO. | | 647.9600 | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .010 ANGLES ± .5° | | REV: 07/07/96 B | QNC: 110 N/C |
| SCALE: NONE | | SHEET 4 OF 5 | |

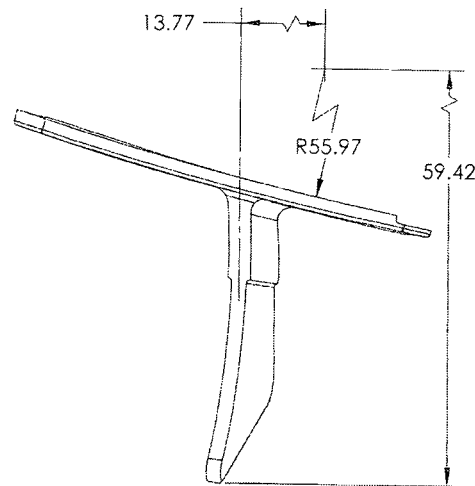
937a



SECTION I-I 4/B7



SECTION J-J 4/A6



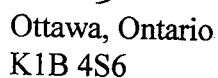
SECTION K-K 4/B5

| | | | |
|----------------------------|--|-------------|--|
| ORIGINAL DATE | | DWG. NO. | |
| JANUARY 1988 | | 647.9600 | |
| DRAWN BY | | CHECKED BY | |
| J. JACKSON | | P. BRAVO | |
| DESIGNED BY | | APPROVED BY | |
| P. BRAVO | | | |
| REVISIONS | | SCALE | |
| NONE | | NONE | |
| UNLESS OTHERWISE SPECIFIED | | SHEET | |
| DIMENSIONS ARE IN INCHES | | 5 OF 5 | |
| 2 PLACES DECIMALS ±.01 | | | |
| 3 PLACES DECIMALS ±.001 | | | |
| ANGLES: 9, 45 | | | |

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

WIPER DEFLECTOR

REV. N/C



Packing Slip

| Date | Invoice # |
|-----------|-----------|
| 9/30/2013 | 715 |

Ship To

Main Finished Goods Location
Dart Aerospace
1270 Aberdeen Street
Hawksbury, Ontario
K6A 1K7

| P.O. No. | Ship | Via | FOB | Project |
|----------|-----------|-----------|--------|---------|
| 18599 | 9/30/2013 | delivered | Archer | |

| Qty | Item Code | Description |
|-------------|-------------------------|--|
| 3 7 1 | Sales Sales Sales | 647.9611P 647.9611P - Scrapped 647.9611P <u>NRE</u> HST (ON) on sales |



Non Conformance Repot

Customer: Dart
Job/ PO# 18599
Part Number: 647.9611
Description: LH Wiper Deflector
QTY: 10

Reject QTY: 7
Customer Supplied ☒ Yes
Material:
Pictures Attached: No

Work Order #:
Date: 28-Sep-13
Is the Part
Identified: Yes

| DESCRIPTION OF NONCONFORMANCE | | |
|-------------------------------|-----|--|
| Item | Qty | |
| 1 | 1 | Machining process stopped mid part. Excessive cutting of material |
| 2 | 5 | Part not machined on blade tip |
| 3 | 1 | Bottom contours misaligned - out of tolerance |
| CAUSE OF NONCONFORMANCE | | |
| Item Ref. | | |
| 1 | | Part misaligned in vise during loading |
| 2 | | Operator loaded wrong program for stock size |
| 3 | | First part machined using a new and improved fixture |
| CORRECTIVE ACTION | | |
| | | |
| 1 | | Operator error coached |
| 2 | | Stock material seperated and clearly marked to remove operator confusion |
| 3 | | New fixture is more rigid and part alignment has been corrected |
| CUSTOMER DISPOSITION | | |
| Item Ref. | | |
| | | |
| | | |
| | | |
| | | |

Inspector/ QA:

G. KUMPULA

Date: 28-Sep-13

NCR#

92813



2228 Gladwin Cres.
Ottawa, Ont.
K1B 4S6

Telephone (613) 899-2405
Fax (613) 226-1719

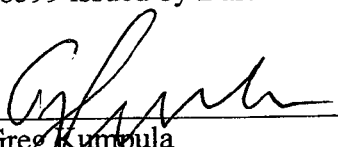
Certificate of Compliance

To:
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury Ont.
K6A 1K7

28 September 2013

| Po Number | Part Number | Quantities |
|-----------|-------------|------------|
| 18599 | 647.9611 | 3 |
| | | |
| | | |
| | | |
| | | |

It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 18599 issued by Dart Aerospace Inc.


Greg Kumpula
Quality Inspector
Archer Precision Inc.
2228 Gladwin Cress.
Ottawa, Ontario
K1B 4S6



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62737

Date: 13-Nov-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

| Terms | | Ship Via | |
|--|---|----------|--------------------|
| Quantity | Description | | |
| 3 ea | Part: 647.9611 3 PCS 647.9611 (16.30) HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N PRICE IS PER PIECE Job: 20130703 | Rev: | PO: 21743 Line: |
| <p align="center">Certificate of Conformance</p> <p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p> <p align="center">ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p> <p>DATE : _____</p> <p>CERTIFIED SIGNATURE : _____</p> <p>RECEIVER SIGNATURE : _____</p> | | | |